ABSTRACT

Purpose:

The purpose of the study was to evaluate the anesthetic efficacy of 4% Articaine with 1:100,000 Epinephrine for surgical removal of impacted maxillary canine.

Materials and method:

A prospective clinical trial was carried out involving 20 patients. The patients were allotted to either Group A or Group B. In Group A patients, 4% Articaine hydrochloride with 1:100,000 Adrenaline was administered and in Group B, 2% Lidocaine HCL with 1:80,000 Adrenaline was administered via buccal and palatal infiltrations. The impacted maxillary canine was removed by standard surgical procedure by a single operator. The time of onset of action, duration of anesthesia, efficacy of anesthesia, hemodynamic parameters and oxygen saturation were monitored during the procedure. Visual analog scale was used to assess pain during surgery.

Results:

An onset period of 42 $\pm$ 7 seconds and 60 $\pm$ 4 seconds and duration of anesthesia of 120 $\pm$ 14 and 91 $\pm$ 10 min was found for Group A and Group B, respectively. Statistically significant differences were seen in the onset and duration of anesthesia between the groups. There were no statistically significant differences found between the groups in depth of anaesthesia, pain score and in hemodynamic parameters.

Conclusion:

The 4 % Articaine is equally effective in providing adequate depth of anaesthesia like that of 2% Lidocaine. 4% Articaine is better in terms of onset and duration of the anesthetic effect than 2% Lidocaine.

KEY WORDS: Articaine, Hemodynamics, Infiltration.